

### REMARKS/DISCUSSION OF ISSUES

By this Amendment, Applicants amend claim 9 to provide proper antecedent basis and consistency with the rest of the claim, and its dependent claims. The scope of the claim is not changed and no new matter is added.

Reexamination and reconsideration are respectfully requested in view of the following Remarks.

### PREFATORY REMARKS

In consideration of the finality of the current Office Action, in the event that any or all of the current rejections are maintained after careful review of the following Remarks, Applicants respectfully request that the Examiner provide a clear explanation as to why each and every argument presented herein is not deemed to be persuasive, including specific citations to the cited art, to establish a clear record for the Board of Patent Appeals for a subsequent Appeal to be filed by Applicants.

For example, throughout the Office Action the Examiner confusingly refers to the same “REF” as supposedly being: a “***reference signal REF***,” “***analog data signal REF***,” “***the REF reference value***,” “***current REF***,” “***the REF circuit***,” etc., etc., etc. REF cannot be - and is not - a value, a signal and a circuit. Applicants respectfully submit that Bu clearly and consistently teaches that REF is a reference current source. See Bu at col. 3, lines 27-28 & 53-54, and col. 4, line 38. REF is not a value. It is not a signal. It is not a current. It is a reference current source.

Clarity of nomenclature will further the prosecution of this case by allowing the Board to understand more clearly the various arguments and positions being proposed by the Examiner. Accordingly, such clarity is respectfully requested in any subsequent Advisory Action.

### 35 U.S.C. § 102

The Office Action rejects claims 1-20 under 35 U.S.C. § 102 over Bu U.S. Patent 6,433,488 (“Bu”).

Applicants respectfully traverse those rejections for at least the following

reasons.

Claim 1

Among other things, the display of claim 1 includes: (1) a data input for receiving an analog data signal ( $V_{in}$ ); and (2) selecting means for selecting one or more of at least two drive elements in response to one or more select signals, and for providing the data signal ( $V_{in}$ ) to the selected one or more drive elements. Furthermore, each drive element is adapted to drive the emissive element in a different drive current range in response to a given voltage of the analog data signal ( $V_{in}$ ).

As best understood by Applicants, it is the Examiner's position that: (1) the reference current REF in Bu is an analog data signal  $V_{in}$ ; (2) circuit block 5 and comparator 6 in Bu correspond to two drive elements; circuit block 2 in Bu corresponds to the selecting means (scan signal 3 supposedly corresponding to the select signal); and “*since circuit 5 is adapted to drive the current in range create (sic) by Vs and circuit 6 adjust (sic) the current value by comparing with a reference current value, therefore they are different drive current range (sic) IDR<sub>V</sub> and IREF.*”

Applicants respectfully disagree.

1) REF is not a signal – it is a reference current source. REF is not a data signal (and neither is  $I_{ref}$ ). More specifically, REF is not an analog data signal  $V_{in}$ . Bu clearly teaches that the analog data signal is DATA SIGNAL 4 in FIG. 2 (col. 3, lines 36-40)

2) Circuit block 2 is not a selecting means for selecting one or more of at least two drive elements. Circuit block 2 does not select current comparator 6 or circuit 5.

3) Circuit block 2 does not “*provid[e] the data signal ( $V_{in}$ ) to the selected one or more drive elements.*” The Examiner states (incorrectly) that REF corresponds to the data signal  $V_{in}$  in claim 1, and circuit block 5 and comparator 6 in Bu correspond to two drive elements. Assuming arguendo that this was correct, then to meet the requirements of claim 1, circuit block 2 would have to provide REF to circuit block 5 and comparator 6. Clearly, it does not. Indeed, FIGs. 2 and 3 clearly show that

the current  $I_{ref}$  is provided directly to comparator 6. Circuit block 2 has nothing to do with it.

4) Circuit block 5 and comparator 6 are not adapted to drive the emissive element in a different drive current range in response to a given voltage of an analog data signal ( $V_{in}$ ) First, the Examiner incorrectly states that REF corresponds to the recited analog data signal. REF is not a signal; it is a reference current source. Furthermore,  $I_{ref}$  does not have a “given voltage” – it is a reference current. Second, circuit block 5 does not drive the emissive element 1 in response to REF (or  $I_{ref}$ ) – except via comparator 6, in which case circuit block 5 and comparator 6 are both driving emissive element 1 together to the same current. Neither element 542 nor Vs does anything “in response to” REF (or even  $I_{ref}$ ).

Accordingly, for at least these reasons, Applicants respectfully submit that claim 1 is clearly patentable over Bu.

Claims 2-6 and 14-16

Claims 2-6 and 14-16 all depend from claim 1 and are all deemed patentable for at least the reasons set forth above with respect to claim 1, and for the following additional reasons.

Claim 5

Among other things, in the display of claim 5, the drive elements comprise transistors having different transistor channel dimensions.

The Examiner states without any citation at all that “*the channel dimensions must be different.*”

The Examiner is respectfully requested to provide a citation to something in Bu that actually teaches this.

In the event that the Examiner is trying to say that such a feature is somehow inherent in Bu, then he is respectfully requested to clearly state that on the record. In that event, Applicants traverse the alleged inherency, and respectfully submit that no *prima facie* case of inherency has been made. See M.P.E.P. § 2112 (IV).

Claim 15

The Examiner incorrectly cites REF in Bu to be the analog data signal

of claim 15. Given that, it is unknown why the Examiner mentions  $V_{fb}$  and DRV in the rejection of claim 15.

As noted above, REF is a reference current source. Meanwhile,  $I_{ref}$  is a fixed reference current value. It does not have any voltage that would ever change the brightness of emissive element 1. It is never provided to a first drive element having a first voltage and provided to a second drive element having a second drive voltage.

### Claim 7

Among other things, the display of claim 7 includes a controller, arranged to receive an analog video signal belonging to a first voltage range, to generate the analog data signal ( $V_{in}$ ) belonging to a second, more narrow voltage range, and to associate the analog data signal ( $V_{in}$ ) with a select signal indicating a desired drive current range.

The Office Actions states that REF corresponds to the controller of claim 7.

Applicants respectfully disagree.

REF does not receive an analog video signal.  $I_{ref}$  is a reference current.  $I_{ref}$  is not an analog video signal.

The rejection of claim 7 is deemed to have many other clear errors, including at least the following:

- 1) there is no such thing as a “*reference signal REF*”;
- 2) REF does not generate  $V_{fb}$ ; and
- 3) REF does not associate any analog data signal with any select signal.

Finally, the arguments provided above in the discussion of claim 1 with respect to the data input and the selecting means also apply to claim 7.

Accordingly, for at least these reasons, Applicants respectfully submit that claim 7 is clearly patentable over Bu.

### Claims 8 and 17-19

Claims 8 and 17-19 depend from claim 7 and are deemed patentable for at least the reasons set forth above with respect to claim 7. Furthermore, claim 18 is also deemed patentable for at least the reasons set forth above with respect to claim

15.

Claim 9

Among other things, the method of claim 9 includes generating an analog data signal ( $V_{in}$ ) belonging to a second, more narrow voltage range, based on an analog video signal belonging to a first voltage range.

The Office Actions says that REF is a data signal generated based on an “original input which is a video signal.”

REF is a reference current source. REF is not a signal. REF is not a data signal. REF is not generated based on an “original input which is a video signal.”

$I_{ref}$  is a reference current.  $I_{ref}$  is not a data signal.  $I_{ref}$  is not generated based on an analog video signal.  $I_{ref}$  does not belong to any voltage range – it is a reference current.

$V_{fb}$  is not a feedback voltage. It is not an analog data signal. It is not generated based on an analog video signal.

Bu does not disclose generating an analog data signal ( $V_{in}$ ) belonging to a second, more narrow voltage range, based on an analog video signal belonging to a first voltage range.

Also among other things, the method of claim 9 includes associating the analog data signal with one or more select signals indicating a desired drive current range.

Bu does not associate any analog data signal with any select signals.

The Examiner incorrectly states that REF corresponds to the analog data signal of claim 9. Again, REF is a reference current source. Bu does not provide REF to a selected one or more drive elements in a pixel cell to drive an emissive element in a desired drive current range in response to any select signals. Bu also does not provide  $I_{ref}$  to a selected one or more drive elements in a pixel cell to drive an emissive element in a desired drive current range in response to any select signals. More specifically,  $I_{ref}$  is directly supplied to comparator 6 (supposedly corresponding to one of the drive elements).  $I_{ref}$  is not provided to anything in response to any driver in response to any select signal, and particularly not in

response to the SCAN signal.

Accordingly, for at least these reasons, Applicants respectfully submit that claim 9 is clearly patentable over Bu.

Claims 10-13 and 20

Claims 10-13 and 20 depend from claim 9 and are deemed patentable for at least the reasons set forth above with respect to claim 9, and for the following additional reasons.

Claim 10

Bu does not disclose the features recited in claim 10. The rejection of claim 10 is deemed to have many clear errors, including at least the following:

- 1) IDR<sub>V</sub> is a current; it is not a threshold voltage of any pixel cell drive element;
- 2) the Office Action fails to identify any first voltage range; and
- 3) the Office Action fails to identify any second voltage range.

Accordingly, for at least these additional reasons, Applicants respectfully submit that claim 10 is clearly patentable over Bu.

Claim 13

The Examiner has incorrectly identified REF as supposedly corresponding to the data signal of claim 13

REF is a reference current source. REF is not a signal. REF is not a data signal. The REF current source operates all the time. REF is not only enabled during a portion of a frame period.

I<sub>ref</sub> is a reference current. I<sub>ref</sub> is not a data signal. I<sub>ref</sub> is generated all the time. I<sub>ref</sub> is not only enabled during a portion of a frame period.

Accordingly, for at least these additional reasons, Applicants respectfully submit that claim 13 is clearly patentable over Bu.

Claim 20

Claim 20 is also deemed patentable for at least the reasons set forth above with respect to claim 15.

**CONCLUSION**

In view of the foregoing explanations, Applicants respectfully request that the Examiner reconsider and reexamine the present application, allow claims 1-20 and pass the application to issue. In the event that there are any outstanding matters remaining in the present application, the Examiner is invited to contact Kenneth D. Springer (Reg. No. 39,843) at (571) 283.0720 to discuss these matters.

Respectfully submitted,

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